PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

eduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Under the Complete if Known Substitute for form 1449A/PTO 10/812,248 Application Number INFORMATION DISCLOSURE Filing Date March 29, 2004 STATEMENT BY APPLICANT First Named Inventor Alex J. Harvey Art Unit 1645 (Use as many sheets as necessary) **Examiner Name** Not yet assigned Sheet of Attomey Docket Number AVI-027

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number  Number - Kind Code <sup>2 (f known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
MW		US20020108132	08-08-2002	Rapp	Tigures Appear		
		5,897,998	04-27-1999	Speksnijder, et al.	<del></del>		
		4,997,763	03-05-1991	Hughes, et al.			
		5,011,780	04-30-1991	Perry			
		5,162,215	11-10-1992	Bosselman, et al.			
$\Delta \mathcal{L}_{-}$		5,340,740	08-23-1994	Petitte, et al.			
<b>V</b>		5,656,479	08-12-1997	Petitte, et al.			
MM		6,027,722	02-22-2000	Hodgson			
	<u> </u>						

		FOREIG	N PATENT DOCU	IMENTS		
Examiner Initials*	Cite No.'	Foreign Patent Document  Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁰
MW		WO 99/19472	04-22-1999	Ivarie, et al.	or research igules Appear	+
		WO 00/11151	03-02-2000	Ivarie, et al.		┿
		WO 00/56932	09-28-2000	Harvey, et al.		┼
1/		WO 90/11355	10-04-1990	Simkiss		┼
V		WO 97/47739	12-18-1997	McArthur		┼
MW		WO 99/10505	03-04-1999	Etches, et al.		+-
	L					<del> </del>

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
MW 		BOSSELMAN, et al., Germline Transmission of Exogenous Genes in the Chicken. 1989, Science, 243: 533-535	-
		BRAZOLOT, et al., Efficient transfection of chicken cells by lipofection, and introduction of transfected blastodermal cells into the embryo. 1991, Mol. Reprod. Dev. 30:304-312.	
$\bigvee$		CARSIENCE, et al., Germline chimeric chickens from dispersed donor blastodermal cells and compromised recipient embryos. 1993, Development, 117:669-675.	<del>                                     </del>
MW		CHAMBERS, et al., Functional Expression Cloning of Nanog, a Pluripotency Sustaining Factor in Embryonic Stem Cells. 2003, Cell, 113:643-655	

\*EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. 'Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 'Applicant is to place a check mark here if English language

Date

Considered

06/29/2006

Examiner

Signature

/Michael Wilson/

Transation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03)
Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
to a collection of information unless it displays a valid OMB control out-

Under the Papervork Reduction Act of 1995, no persons are required to re-

Substitute for form 14498/PTO		Complete if Known
	Application Number	10/812,248
INFORMATION DISCLOSURE	Filing Date	March 29, 2004
STATEMENT BY APPLICANT	1	Alex J. Harvey
STATEMENT BY AFFEIGANT	Art Unit	1645
(Use as many sheets as necessary)	Examiner Name	Not yet assigned
Sheet 2 4	Attorney Docket Number	AVI-027

		NON PATENT LITERATURE DOCUMENTS	
Examiner Cite No.		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, elc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ²
MW		D'COSTA, et al., Characterization of stage-specific embryonic antigen-1(SSEA-1) expression during early development of the turkey embryo. 1999, Int. J. Dev. Biol. 43:349-356	
		DONOHO, et al., Analysis of Gene Targeting and Intrachromosomal Homologous Recombination Stimulated by Genomic Double-Strand Breaks in Mouse Embryonic Stem Cells. 1998, Mol. Cell. Biology, 118:(7) 4070-4078	
		ETCHES, et al., Contributions to Somatic and Germline Lineages of Chicken Blastodermal Cells Maintained in Culture. 1996, Molec. Repr. Devel., 45:291-298	
		ETCHES, et al., Chimeric Chickens and Their Use in Manipulation of the Chicken Genome. 1993, Poultry Science, 72:882-889	
		ETCHES, et al., Manipulation of Blastodermal Cells. 1997, Poultry Science, 76:1075-1083	1
		EVANS, et al., Establishment in culture of pluripotential cells from mouse embryos. 1981, Nature, 292: 154-156	
A		FRASER, et al, Efficient incorporation of transfected blastodermal cells into chimeric chicken embryos. 1993, Int. J. Devel. Biol., 37:381-385.	
		HAN, Production of germline chimeras by transfer of chicken gonadal primordial germ cells maintained in vitro for an extended period. 2002, Theriogenology 58: 1531-1539	
		HORIUCHI, et al, Chicken Leukemia Inhibitory Factor Maintains Chicken Embryonic Stem Cells in the Undifferentiated State. 2004, J. Biol. Chemistry, 279: (23) 24514 -24520	
		KALYANI, et. al., Neuroepithelial Stem Cells from the Embryonic Spinal Cord: Isolation, Characterization, and Clonal Analysis. 1997, Developmental Biol. 186:202-223	
		KAGAMI, et al., Sexual Differentiation of Chimeric Chickens Containing ZZ and ZW Cells in the Germline. 1995, Mol. Reprod. Dev., 42:379-387.	
		KAGAMI, et al., The Developmental Origin of Primordial Germ Cells and the Transmission of the Donor- Derived Gametes in Mixed-Sex Germline Chimeras to the Offspring in the Chicken. 1997, Mol. Reprod. Dev., 48:501-510	
		KARAGENC, et. al., Soluble Factors and the Emergence of Chick Primordial Germ Cells in Vitro. 2000, Poultry Science, 79:80-85	
		KINO, et al., Production of chicken chimeras from injection of frozen-thawed blastodermal cells. 1995, Poultry Sci.74 (Suppl. 1):26. (Abstr.)	
$\bigvee$		KINO, et al., Production of chicken chimeras from injection of frozen-thawed blastodermal cells. 1997, Poultry Sci., 76:753-760.	
MW		KIMURA, et al., Further Purification of a Fibroblast Growth Factor-Like Factor From Chick Embryo Extract By Heparin-Affinity Chromatography. 1988, In Vitro Cellular & Dvlp., 25: (3)236-242	

Examiner	/Michael Wilson/	Date	06/29/2006	
Signature		Considered	00, 20, 2000	

Signature | Considered | Considered |
\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

'Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

DONOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03)
Approved for use through 08/30/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE to a collection of information unless it displays a valid OMB continuous to a collection of information unless.

Substit	ute for form 1449B/PTO			Complete if Known		
				Application Number	10/812,248	
INF	ORMATION DISC	CLOS	URE	Filing Date	March 29, 2004	
	STATEMENT BY APPLICANT			First Named Inventor	Alex J. Harvey	
317	AILMLNI DI AF	T LIC	A14 1	Art Unit	1645	
	(Use as many sheets as ne	cessary)		Examiner Name	Not yet assigned	
Sheet	3	of	4	Attomey Docket Number	AVI-027	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
ми		LINNELL, et al., Transgenic mice for the preparation of puromycin-resistant primary embryonic fibroblast feeder layers for embryonic stem cell selection. 2001, Mammalian Genome 12:169-171	
		MEI, et al., The tkNeo Gene, but Not the pgkPuro Gene, Can Influence the Ability of the β-Globin LCR to Enhance and Confer Position-Independent Expression onto the β-Globin Gene. 2000, Experimental Cell Research 260:304-312	
	_	MUSCARELLA, et al., Expression of Cell Death Regulatory Genes and Limited Apoptosis Induction in Avian Blastodermal Cells. 1998, Mol. Reprod. Devlp., 51:130-142	
		MEAKING, et al., Electroporation-induced damage in mammalian cell DNA. 1995, Biochimica et Biophysica Acta., 1264: 357-362	
		MOMOSE, et al., Efficient targeting of gene expression in chick embryos by microelectroporation. 1999, Develop. Growth Differ., 41:335-344	
		MITSUI, et al., The Homeoprotein Nanog is Required for Maintenance of Pluripotency in Mouse Epiblast and ES Cells. 2003, Cell, 113:631-642	
		NICOLAS-BOLNET, ct al., Synergistic Action of Two Sources of Avian Growth Factors on Proliferative Differentiation of Chick Embryonic Hematopoietic Cells. 1995, Poultry Science, 74:1102-1116	
		PAIN, et al., Long term in vitro culture and characterisation of avian embryonic stem cells with multiple morphogenetic potentialities. 1996, Development, 122:2339-2348	
		PAIN, et al., Chicken Embryonic Stem Cells and Transgenic Strategies. 1999, Cells Tissues Organs, 165: 212-219	
		PETITTE, et al., Cloning and characterization of cDNAs encoding two forms of avian stem cell factor. 1996, 1307: 149-151	
		PETITTE, et al., Production of somatic and germline chimeras in the chicken by transfer of early blastodermal cells. 1990, Development, 108:185-189	
V		PETITTE, et al., The Origin of the Avian Germ Line and Transgenesis in Birds. 1997, Poultry Science 76:1084-1092	
MW		ROUET, et al., Expression of a site-specific endonuclease stimulates homologous recombination in mammalian cells. 1994, Proc. Natl. Acad. Sci. USA, 91:6064-6068	

	· · · · · · · · · · · · · · · · · · ·		
Examiner	/Michael Wilson/	Date	
Signature	/MICHAEL WILBON/	Considered 06/29/2006	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). \*Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03)

Approved for use through 06/30/2008. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE to a collection of information unless it displays a valid OMB control number.

Substitu	rte for form 1449B/PTO	· -	· · · · · · · · · · · · · · · · · · ·		Complete if Known
0000				Application Number	10/812,248
INF	ORMATION DISC	LOS	IRE	Filing Date	March 29, 2004
	ATEMENT BY AP			First Named Inventor	Alex J. Harvey
317	AIEMENI DI AF	PLICA	-<14 I	Art Unit	1645
	(Use as many sheets as nec	essary)		Examiner Name	Not yet assigned
Sheet	4	of	4	Attomey Docket Number	AVI-027

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
MM		SALTER, et al., Transgenic Chickens: Insertion of Retroviral Genes into the Chicken Germ Line; 1987, Virology 157, 236-240	
		SARGENT, et al., Repair of Site-Specific Double-Strand Breaks in a Mammalian Chromosome by Homologous and Illegitimate Recombination. 1997, Mol. And Cell. Biolg., 17: (1) 267-277	
		SATO, et al., Regulated Gene Expression in the Chicken Embryo by Using Replication-Competent Retroviral Vectors. 2002, J. of Virology, 76:(4) 1980-1985	
		SPEKSNIJDER, Germline Chimeric Chickens From FACS-Sorted Donor Cells; 1999, Mol. Reprod. And Dvlp., 52:33-42	
		THORAVAL, et al., Somatic and Germline Chicken Chimeras Obtained from Brown and White Leghorns by Transfer of Early Blastodermal Cells; 1994, Poultry Sci., 73:1897-1905.	
		TUCKER, et al., A transgenic mouse strain expressing four drug-selectable marker genes. 1997, Nucleic Acids Research, 25:(18) 3745-3746	
		URVEN, et al., Analyses of germline development in the chick embryo using an antimouse EC cell antibody; 1988, Development, 103:299-304.	
		VATTERONI, et al., Analysis of electroporation-induced genetic damages in V79/AP4 Chinese hamster cells. 1993, Mutation Research, 291:163-169	
		WEI, et al., Long-Term Culture of Chicken Blastodermal Cells (CBCs) and Selection of Transfected CBCs Using Antibiotic Resistance. Methods in Mol. Biology, 136: 399-403	
		WEI, et al., Selection of Genetically Modified Chicken Blastodermal Cells by Magnetic-Activated Cell Sorting. 2001, Poultry Science, 80: 1671-1678	
		WATANABE, et al., Distribution analysis of transferred donor cells in avian blastodermal chimeras; 1992, Development, 114:331-338.	
		WOODS, et al., Production of Avian Chimeras and Germline Transmission. Methods in Mol. Biology, 136: 385-389	
		YANG, et al., Use of Avian Cytokines in Mammalian Embryonic Stem Cell Culture. 1994, Poultry Science, 73:965-974	
		YEOM, et al., Germline regulatory element of Oct-4 specific for the totipotent cycle of embryonal cells.  Development, 122: 881-894	
1		YAFFE, et al., Retention of Differentiation Potentialities During Prolonged Cultivation of Myogenic Cells. 1968, Dpt. Of Cell Biology, 477-483	
MW		ZAJCHOWSKI, et al., Incorporation of Genetically Modified Cells in Chicken Chimeras. Methods in Mol. Biology, 136: 391-397	

Examiner		Date	05/00/0005
Signature	/Michael Wilson/	Considered	06/29/2006

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw tine through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). \*Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.